

10/625,958

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Art Unit: 2837

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attachment

Please amend the specification page 13, line 8 to read as

-- in U.S. Patent No. 6,775,157, issued August 10, 2004, the --.

Thank you.

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Primary Examiner

converter circuit 14, and an inverter circuit 16 and an inverter control 18. A global system control 11 provides the overall command, control and feedback circuitry and computation for operating drive system 10.

[0044] Active EMI filter 12 senses common and differential mode noise on input a-c lines L1, L2 and optionally on a common line COM, and provides a feedback signal to cancel the noise generated in system 10. A detailed discussion of active EMI filter 12, showing various embodiments with circuit diagrams is provided in ~~(U.S. 2001/0022111)~~ pending U.S. Patent Application Serial No. ~~10/106,775~~ <sup>6,775,157</sup>, issued August 10, 2004, the entire contents of which is hereby incorporated by reference in the present

application. Active EMI filter 12 provides excellent noise reduction operation to greatly improve overall efficiency and noise immunity for system 10. Active EMI filter 12 uses active switching without a current transformer to sense and counteract common and differential mode noise on a front end of system 10. By avoiding a current transformer in active EMI filter 12, a more linear noise filtering operation is achieved without the losses associated with current transformer type filtering systems. It should be apparent that appropriately constructed active EMI filters can be located in other sections of motor drive system 10, operating on the same principles as those upon which EMI filter 12 operates.

[0045] PFC power converter 14 employs dynamic bus voltage control and switching loss minimization to obtain high performance with increased efficiency. Switching in PFC power converter 14 is controlled by controller 11, which also provides a control signal for the voltage rate of change per unit time (dv/dt). PFC power converter 14 provides feedback to controller 11 indicating operational parameter values to obtain a closed loop control for power factor correction and power conversion in PFC power converter 14.

[0046] Gate driver 18 receives a gate command signal from controller 11 to provide conditioned gate signals to the switches in inverter 16. One of the